Complete Summary

GUIDELINE TITLE

Care of the patient with age-related macular degeneration.

BIBLIOGRAPHIC SOURCE(S)

American Optometric Association. Care of the patient with age-related macular degeneration. 2nd ed. St. Louis (MO): American Optometric Association; 1997. 47 p. (Optometric clinical practice guideline; no. 6). [73 references]

COMPLETE SUMMARY CONTENT

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SCOPE

DISEASE/CONDITION(S)

Age-related macular degeneration

GUIDELINE CATEGORY

Diagnosis
Evaluation
Management

CLINICAL SPECIALTY

Optometry

INTENDED USERS

Health Plans
Optometrists

GUIDELINE OBJECTIVE(S)

- To identify ocular, personal, and environmental risk characteristics for age-related macular degeneration (AMD)
- To accurately diagnose AMD
- To develop a decision making strategy for management of patients at risk for severe vision loss from AMD
- To provide information and resources for appropriate patient education in the area of vision rehabilitation
- To propose a philosophy and rationale for management and prevention of AMD

TARGET POPULATION

Adults with age-related macular degeneration

INTERVENTIONS AND PRACTICES CONSIDERED

Diagnosis of age-related macular degeneration

1. Patient history
2. Ocular examination
    - Best corrected visual acuity, including near monocular visual acuity
    - Amsler grid testing
    - Sensorimotor examination
    - Refraction
    - Biomicroscopy
    - Tonometry
    - Stereoscopic fundus examination with pupillary dilation
3. Supplemental testing
    - Macular function assessment (e.g., contrast sensitivity, photostress test)
    - Color vision
    - Central 10-degree computerized automated perimetry
    - Fundus photography (including the use of a red-free filter)
    - Scanning laser ophthalmoscope

Management of age-related macular degeneration

1. Laser photocoagulation treatment
2. Amsler gird self-assessment
3. Patient education
4. UVR protection
5. Antioxidant supplementation
6. Low vision consultation and evaluation
7. Consultation and referral

MAJOR OUTCOMES CONSIDERED

Not stated

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Hand-searches of Published Literature (Primary Sources)
Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

The guideline developer performed literature searches using the National Library of Medicine's Medline database and the VisionNet database.

NUMBER OF SOURCE DOCUMENTS

Not stated

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Expert Consensus (Committee)

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Not stated

METHODS USED TO ANALYZE THE EVIDENCE

Review

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not applicable

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Not stated

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Not applicable

COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

METHOD OF GUIDELINE VALIDATION

Internal Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

The Reference Guide for Clinicians was reviewed by the American Optometric Association (AOA) Clinical Guidelines Coordinating Committee and approved by the AOA Board of Trustees.

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

Summarized by the National Guideline Clearinghouse (NGC):

Diagnosis of Age-Related Macular Degeneration

The evaluation of patients with retinal changes suggestive of age-related macular degeneration (AMD) or patients with diagnosed AMD may include, but is not limited to the following areas:

1. Patient history
2. Ocular examination
    - Best corrected visual acuity, including near monocular visual acuity
    - Amsler grid testing
    - Sensorimotor examination
    - Refraction
    - Biomicroscopy
    - Tonometry
    - Stereoscopic fundus examination with pupillary dilation
3. Supplemental testing
    - Macular function assessment (e.g., contrast sensitivity, photostress test)
    - Color vision
    - Central 10-degree computerized automated perimetry
    - Fundus photography (including the use of a red-free filter)
    - Scanning laser ophthalmoscope

These components of patient care are described in greater detail in the guideline document.

Management of Age-Related Macular Degeneration

The extent to which an optometrist can provide medical treatment for age-related macular degeneration may vary, depending on the state's scope of practice laws and regulations and the individual optometrist's certification. Treatment of the patient with AMD may require consultation with or referral to the patient's primary care physician, an ophthalmologist, or other health care practitioner for those services outside the optometrist's scope of practice.

Management of the patient with nonexudative AMD varies considerably from that of the patient diagnosed with exudative AMD, for whom immediate treatment is critical. Treatment options for patients with nonexudative AMD and exudative AMD are described in greater detail in the guideline document.

The frequency and composition of evaluation and management visits for age-related macular degeneration is summarized in the following table:

Frequency and Composition of Evaluation and Management Visits for Age-Related Macular Degeneration

Type of Patient	Frequency of Examination	Amsler Grid	Stereo Fundus Biomicroscopy	Central 10 degree Automated Visual Field (AVF)	Fundus Photography	Mana Plan
Patient with two or more risk factors for AMD, over age 55	Annual examination	Yes	Yes	Yes; baseline, repeat every 2 years	Yes; baseline, repeat every 2 years or as necessary	Patier educa Recor prote antiox suppl home week
Patient with hard drusen and/or pigmentary degeneration	6 to 12 months depending on extent of atrophy	Yes	Yes	Yes; repeat every 2 years	Yes; repeat every 2 years	Patier educa Recor prote antiox suppl home twice
Patient with geographic atrophy, VA 20/20-20/70	6 to 12 months depending on extent of atrophy	Every interim visit	Every interim visit	Every 1 to 2 years	Yes; repeat every year	Patier educa Recor prote antiox suppl home every Monit
Patient at high risk with soft confluent drusen and granular pigmentary degeneration	4 to 6 months	Every interim visit	Every interim visit	Annually	Annually	Patier educa Recor prote antiox suppl home daily; consu

						evalu
Patient with CNV within 2500 microns of center of FAZ every 2 to 3 months	2 weeks after FA laser photocoagulation; at 6 weeks, then after repeat FA	Every interim visit	Every interim visit	Semiannually	Semiannually	Patier educa Recor prote antio suppl home daily; consu signs recur Low v consu evalu
Patient with disciform scar in both eyes	6 to 12 months	Not necessary	Every interim visit	Annually; consider central 30º AVF, depending on central fixation	Annually	Revie vision consu evalu

CLINICAL ALGORITHM(S)

An algorithm is provided for Optometric Management of the Patient with AMD.

EVIDENCE SUPPORTING THE RECOMMENDATIONS

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of supporting evidence is not specifically stated for each recommendation.

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

Until the means to prevent or cure age-related macular degeneration (AMD) are in place, optometrists need to understand the etiopathogenesis of the disease in order to reduce patient's risk for severe vision loss by early identification and timely referral for laser photocoagulation. Optometrists should educate and inform patients about the natural history of the retinal abnormalities associated with AMD. In certain cases useful vision can be maintained if the patient is informed and educated to seek care promptly. Improved patient understanding of AMD will promote compliance and in some cases may help preserve useful vision.

Subgroups Most Likely to Benefit:

Patients within the following groups at risk should be screened for signs and symptoms of age-related macular degeneration:

- Persons over 60 years of age
- Persons with hypertension or cardiovascular disease
- Cigarette smokers
- Persons with a first-degree family (sibling or maternal) history of vision loss from AMD regardless of age
- Persons with aphakia or pre-1984 pseudophakia
- Persons whose history indicates significant cumulative light exposure

POTENTIAL HARMS

Not stated

QUALIFYING STATEMENTS

QUALIFYING STATEMENTS

Clinicians should not rely on this Clinical Guideline alone for patient care and management. Please refer to the references and other sources listed in the original guideline for a more detailed analysis and discussion of research and patient care information.

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

An implementation strategy was not provided.

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

Getting Better
Living with Illness
Staying Healthy

IOM DOMAIN

Effectiveness
Patient-centeredness

IDENTIFYING INFORMATION AND AVAILABILITY

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ADAPTATION

Not applicable: The guideline was not adapted from another source.

DATE RELEASED

1994 (reviewed 1999)

GUIDELINE DEVELOPER(S)

American Optometric Association - Professional Association

SOURCE(S) OF FUNDING

Funding was provided by the Vision Service Plan (Rancho Cordova, California) and its subsidiary Altair Eyewear (Rancho Cordova, California)

GUIDELINE COMMITTEE

American Optometric Association Consensus Panel on Care of the Patient with Age-Related Macular Degeneration

COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

Members: Anthony A. Cavallerano, O.D. (Principal Author); John P. Cummings, O.D.; Paul B. Freeman, O.D.; Randall T. Jose, O.D.; Leonard J. Oshinskie, O.D.; John W. Potter, O.D.

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FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Not stated

GUIDELINE STATUS

This is the current release of the guideline.

According to the guideline developer, this guideline has been reviewed on a biannual basis and is considered to be current. This review process involves updated literature searches of electronic databases and expert panel review of new evidence that has emerged since the original publication date.

An update is not in progress at this time.

GUIDELINE AVAILABILITY

Electronic copies: Available in Portable Document Format (PDF) from the